PATENT
U.S. Serial No. 09/421,590
Docket No. **COS98021**

REMARKS

In the Office Action, the Examiner rejected claims 1-4 under 35 U.S.C. § 103(a) as

unpatentable over Waters et al. (U.S. Patent No. 5,907,607) in view of Cox et al. (U.S. Patent

No. 5,812,533). Applicants note that the Examiner rejected claims 3 and 4 based on a

combination of Waters et al. and Cox et al. (Office Action, page 2), but cited Waters et al. and

Daly et al. in the actual rejection of claims 3 and 4 (Office Action, pages 5-6). Applicants

further note that Daly et al. (U.S. Patent No. 5,748,896) is a reference cited by Applicants in an

Information Disclosure Statement. Applicants assume that the Examiner meant to reject claims 3

and 4 based on a combination of Waters et al. and Daly et al. If Applicants are incorrect in this

assumption, Applicants request clarification as to the grounds of rejection with regard to claims 3

and 4.

Applicants respectfully traverse the Examiner's rejections. Claims 1-4 remain pending.

At pages 2-5 of the Office Action, the Examiner rejected claims 1 and 2 under 35 U.S.C.

§ 103(a) as allegedly unpatentable over Waters et al. in view of Cox et al. Applicants

· respectfully traverse the rejection.

Claim 1, for example, recites a combination of features of a service administration system

that distributes service processing resources among one or more service nodes of an intelligent

communications network, where each service node provides services at a network resource

associated with a service node. The system includes a device for receiving re-usable service

components for providing services at a service node of the intelligent communications network,

where each service component has an associated service profile defining service node resources

required for storing, maintaining and executing the service; a device for receiving configuration

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criteria including physical resource capacity of each service node of the network; a database device for storing said received service components, the service node configuration criteria, and service profile associated with the service components; a distribution mechanism for distributing copies of the service components to one or more service nodes according to the service profile information associated with a service and a configuration criteria of the service nodes; and a trigger mechanism for automatically activating and deactivating the service component distributed to the service node, wherein the utilization of service node resources are optimized by activating the service components at service nodes during periods of high demand for an associated service and deactivating service components at service nodes during periods of low demand for the service.

Neither Waters et al. nor Cox et al., whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in claim 1. For example, neither Waters et al. nor Cox et al. discloses or suggests a trigger mechanism for automatically activating and deactivating the service component distributed to the service node, wherein the utilization of service node resources are optimized by activating the service components at service nodes during periods of high demand for an associated service and deactivating service components at service nodes during periods of low demand for the service.

The Examiner admitted that Waters et al. does not disclose a trigger mechanism (Office Action, page 3). The Examiner alleged, however, that Cox et al. discloses a trigger mechanism for automatically activating and deactivating the service component distributed to the service node, wherein the utilization of service node resources are optimized by activating the service components at service nodes during periods of high demand for an associated service and

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deactivating service components at service nodes during periods of low demand for the service,

and cited column 19, lines 27-34, and column 41, lines 15-16, of Cox et al. for support (Office

Action, page 3). Applicants respectfully disagree.

At column 19, lines 27-34, Cox et al. discloses:

> This section briefly addresses two areas for the sake of clarity and completeness. Firstly,
> it relates concepts and processes of an IN Architecture and a service creation process.
> Secondly, and more pertinently, the section details the requirements describing how
> services are to be deployed within the SDI 200. This includes the delivery of a service to
> the Intelligent Network Element and the activation of a service within the domain of a
> virtual network.

This section of Cox et al. discloses that a service can be activated within SDI 200. Nowhere in

this section, or elsewhere, does Cox et al. disclose or suggest that utilization of service node

resources are optimized by activating the service components at service nodes during periods of

high demand for an associated service and deactivating service components at service nodes

during periods of low demand for the service, as recited in claim 1.

At column 41, lines 15-16, Cox et al. discloses "STEP 4410: A service is activated, when

required, in the Virtual Network 800. " This section of Cox et al. discloses that a service is

activated when required. Nowhere in this section, or elsewhere, does Cox et al. disclose or

suggest that utilization of service node resources are optimized by activating the service

components at service nodes during periods of high demand for an associated service and

deactivating service components at service nodes during periods of low demand for the service,

as recited in claim 1.

For at least these reasons, Applicants submit that claim 1 is patentable over Waters et al.

and Cox et al., whether taken alone or in any reasonable combination. Independent claim 2

recites features similar to the features described above with regard to claim 1. Claim 2 is,

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therefore, patentable over <u>Waters et al.</u> and <u>Cox et al.</u>, whether taken alone or in any reasonable combination, for reasons similar to reasons given with regard to claim 1.

At pages 5-6 of the Office Action, the Examiner rejected claims 3 and 4 under 35 U.S.C. § 103(a) as allegedly unpatentable over <u>Waters et al.</u> in view of <u>Daly et al.</u> Applicants respectfully traverse.

Independent claim 3 recites a combination of features of a service processing system that controls a communications network having multiple service nodes, where each service node comprises at least one logic execution environment that hosts managed objects. The service processing system includes a data manager and at least one service administrator. The data manager maintains at each service node a local storage of managed objects and data needed for service processing within the service node and monitors the operational status of the local storage at the service nodes. The at least one service administrator controls the deployment and activation of services within the service processing system by distributing, from a global repository, managed objects and data to one or more data managers associated with the service nodes in the communications network.

Neither <u>Waters et al.</u> nor <u>Daly et al.</u>, whether taken alone or in any reasonable combination, discloses or suggests a data manager that maintains at each service node a local storage of managed objects and data needed for service processing within the service node and monitors the operational status of the local storage at the service nodes.

The Examiner admitted that <u>Waters et al.</u> does not disclose or suggest a data manager that monitors operational status of the local storage at the service nodes (Office Action, page 5). The Examiner alleged, however, that <u>Daly et al.</u> discloses a data manager that monitors operational

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status of the local storage at the service nodes and cited column 4, lines 4-29, and column 9, lines

50-56, of Daly et al. for support (Office Action, page 5). Applicants disagree.

At column 4, lines 4-29, Daly et al. discloses:

> The apparatus further includes a server manager component for receiving the network
> service instantiation data from the service object. Additionally, there is included a server
> manager window, representing the user interface component for the server manager
> component. The server manager window functions to display a status of the instantiations
> responsive to the network service instantiation data.
>
> In another embodiment, the invention relates to a method for managing network services
> on the plurality of network servers in a computer network. The method includes the step
> of providing at least one service component in a component repository. The service
> component corresponds to one of the network services. There is also included the step of
> providing a server manager component, which communicates with the component
> repository to ascertain the presence of the service component.
>
> Additionally, the method includes the step of executing a service object associated with
> the service component. When executed, the service object communicates with the
> plurality of network servers to obtain network service instantiation data relating to
> instantiations of the one of the network services on the plurality of network servers. The
> method also includes the step of passing the network service instantiation data to a server
> manager window component for displaying a status of the instantiations responsive to the
> network service instantiation data.

Nowhere in this section, or elsewhere, does Daly et al. disclose or suggest a data manager that

maintains at each service node a local storage of managed objects and data needed for service

processing within the service node and monitors the operational status of the local storage at the

service nodes. The Examiner appears to equate the "component repository" of Daly et al. to the

local storage recited in claim 3. Applicants respectfully disagree.

At column 7, lines 45-49, Daly et al. describes the component repository as follows:

> In accordance with the preferred embodiment, there exists a component repository, which
> may comprise one or more files residing either locally at the administrator's terminal or
> on the network for indicating the locations of the components.

Daly et al. does not disclose or suggest that the component repository is maintained at each of a

plurality of service nodes, as required by claim 3. Instead, Daly et al. discloses that the

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component repository is stored either locally at the administrator's terminal or on the network (col. 7, lines 45-49). Also, Daly et al. does not disclose or suggest that the component repository includes data needed for service processing within the service node, as further required by claim 3. Instead, Daly et al. discloses that the component repository indicates the locations of components.

At column 9, lines 50-56, of Daly et al. discloses:

> The service object itself preferably possesses sufficient information to allow it to obtain network service instantiation data and status from the network servers. The network service instantiation data and status, once obtained by the service object, are then written into the aforementioned memory area for access by the server manager component.

Nowhere in this section, or elsewhere, does Daly et al. disclose or suggest a data manager that maintains at each service node a local storage of managed objects and data needed for service processing within the service node and monitors the operational status of the local storage at the service nodes. The Examiner appears to equate the "memory area" of Daly et al. with the local storage recited in claim 3. Applicants respectfully disagree.

Daly et al. does not disclose or suggest that the memory area is maintained at each of a plurality of service nodes, as required by claim 3. Also, Daly et al. does not disclose or suggest that the operational status of the memory area is monitored by a data manager, as further required by claim 3.
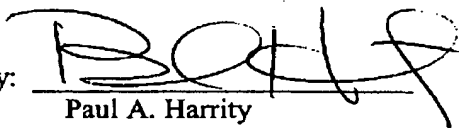
For at least these reasons, Applicants submit that claim 3 is patentable over Waters et al. and Daly et al., whether taken alone or in any reasonable combination. Independent claim 4 recites features similar to the features described above with regard to claim 3. Claim 4 is, therefore, patentable over Waters et al. and Daly et al., whether taken alone or in any reasonable combination, for reasons similar to reasons given with regard to claim 3.

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In view of the foregoing remarks, Applicants respectfully request the Examiner's

reconsideration of the application and the timely allowance of pending claims 1-4.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 13-2491 and please credit any excess

fees to such deposit account.

Respectfully submitted,

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